

**CLAIMS:**

1 Sub 1. Device for transferring data between two  
2 workstations connected to a network, characterized in  
3 A2 that it comprises means for distributing said data among  
4 a plurality of links of said network.

1 2. Device according to claim 1, characterized in  
2 that it comprises a memory for storing said data.

1 3. Device according to claim 2, characterized in  
2 that said memory is a dual port memory.

1 4. Device according to claim 2, characterized in  
2 that it comprises:

3 - high speed interface for transmitting said data  
4 from a workstation to said memory,

5 - associated with each link, a low speed interface  
6 for transmitting a part of said data from said memory to  
7 said link, and

8 - a controller for monitoring the data flow between  
9 said workstation and said plurality of links, by  
10 controlling said memory and said interfaces.

1 5. Device according to claim 4 characterized in  
2 that, said high speed interface receiving data at an  
3 initial rate equal to the sum of the rates at which low  
4 speed interfaces transmit on the network, two at least of  
5 said low speed interfaces run at different rates.

1           6. Device according to claim 5 characterized in  
2 that, each said low speed interface running at a rate  
3 which is a fraction of said initial rate, all said  
4 fractions having a common denominator and at least one of  
5 said fractions being irreducible, the data flow is  
6 cyclically distributed among said low speed interfaces in  
7 such a way that each low speed interface receives a  
8 number of consecutive bytes from said flow equal to the  
9 numerator of its associated fraction.

1           7. Device according to claim 4, characterized in  
2 that at least one of said low speed interfaces comprises  
3 means for establishing a connection with a modem.

1           8. Device according to claim 7, characterized in  
2 that said high speed interface comprises means for  
3 transferring said data with a modem.

1           9. Device according to claim 2, characterized in  
2 that it comprises:

3           - associated with each link, a low speed interface  
4 for transmitting part of said data from said link to said  
5 memory,

6           - a high speed interface for transmitting said data  
7 from said memory to a workstation, and

8           - a controller for, in a first state, monitoring the  
9 data flow between said plurality of links and said  
10 workstation by controlling said memory and said  
11 interfaces.

1           10. Device according to claim 9 characterized in  
2 that, said high speed interface receiving data at an

3 initial rate equal to the sum of the rates at which low  
4 speed interfaces receive from the network, two at least  
5 of said low speed interfaces run at different rates.

1 11. Device according to claim 10 characterized in  
2 that, each said low speed interface running at a rate  
3 which is a fraction of said initial rate, all said  
4 fractions having a common denominator and at least one of  
5 said fractions being irreducible, the data flow is  
6 cyclically distributed among said low speed interfaces in  
7 such a way that each low speed interface receives a  
8 number of consecutive bytes from said flow equal to the  
9 numerator of its associated fraction.

1 12. Device according to claim 9, characterized in  
2 that at least one of said low speed interfaces comprises  
3 means for establishing a connection with a modem.

1 13. Device according to claim 12, characterized in  
2 that said high speed interface comprises means for  
3 transferring said data with a modem.

1 14. Device according to claim 9, characterized in  
2 that:

3 - said high speed interface is provided for  
4 alternately transmitting other data from said workstation  
5 to said memory,

6 - each said low speed interface is alternately  
7 provided for transmitting a part of said other data from  
8 said memory to said link,

9 - said controller, in a second state, monitoring the  
10 data flow between said workstation and said plurality of

links.

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